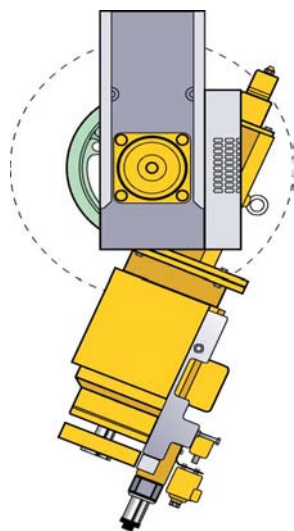


TECHNICAL CATALOGUE

A DESIGN GUIDE FOR ELECTRICAL MRL LIFT



Technological revolution

The ECO solves the old problem of eliminating the machine room, by fitting all the necessary equipment into the shaft. The new machine-room-less elevator family is radically innovative both in technology and design.

Every single part, from the guides to the drive, the car and the controls, has been re-designed to save space and costs.

Reduced space requirements

The clever solution of VOEM positions the drive on top of the guide rails. The traction drive is based on a 1:1 roping ratio allowing the drive arrangement to save valuable space.

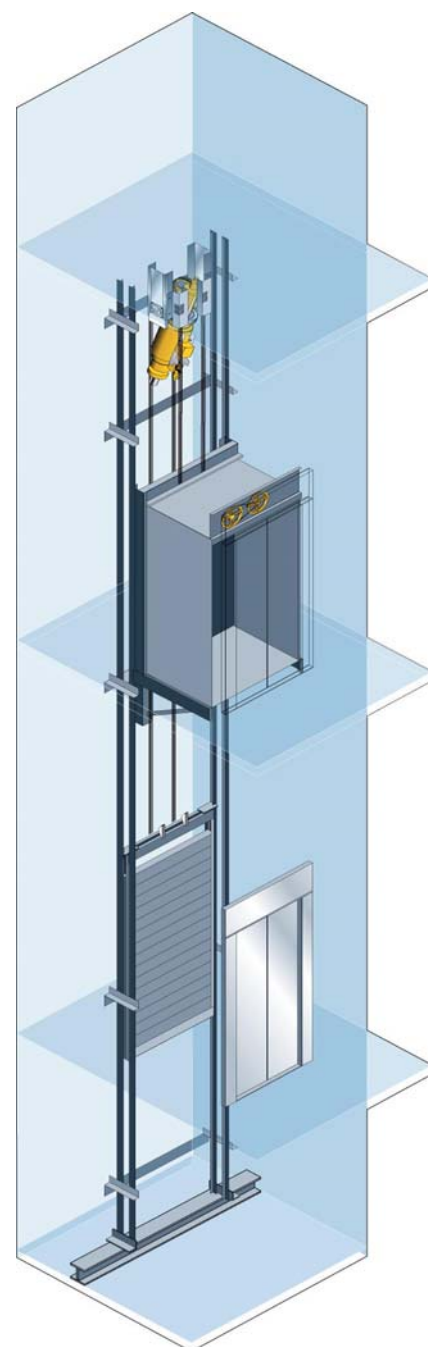
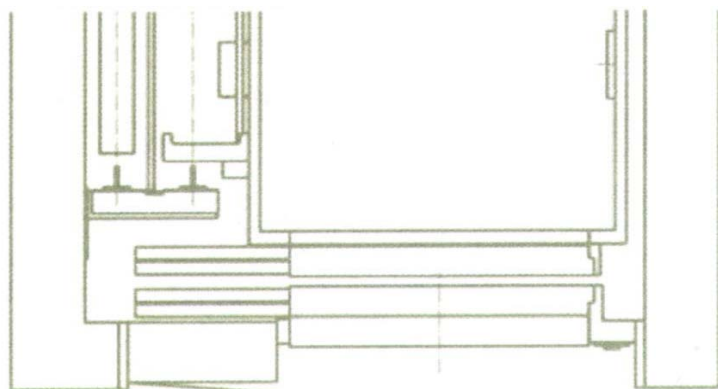
Shaft dimensions and pit are exactly the same as needed by any other traditional hydraulic elevator.

The distributed control system is partly located on top of the car and mainly in the control panel situated in the side wall of the top landing door. This advanced technology also helps to save space and to facilitate maintenance.

Compliance with EC Lifts Directive

ECO fully complies with the new EC Lifts Directive which requires several additional security items as standard. These are:

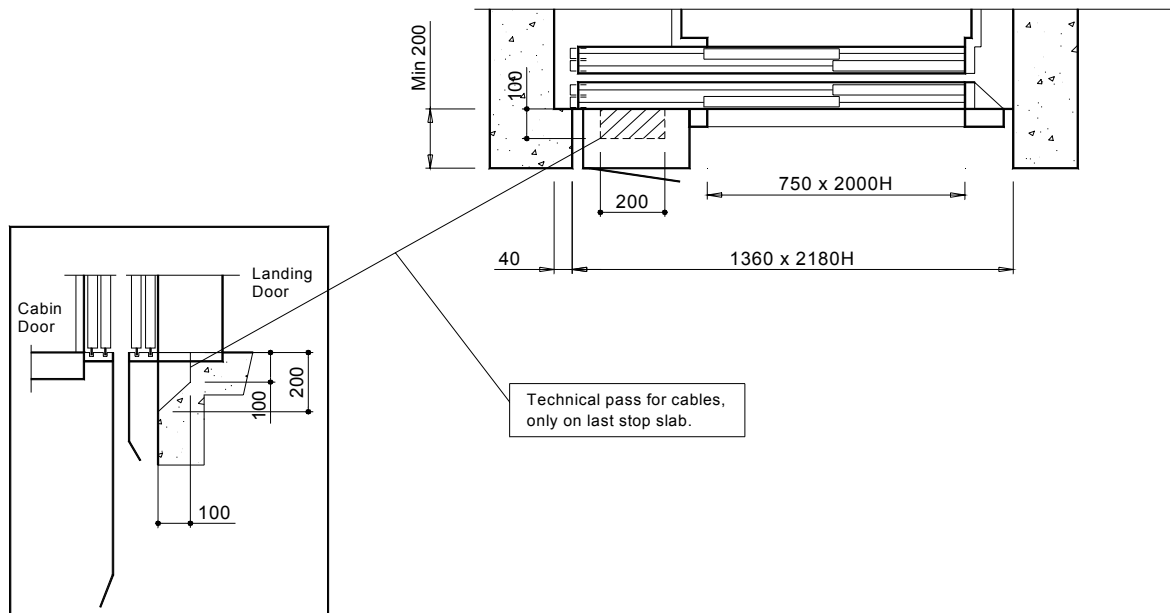
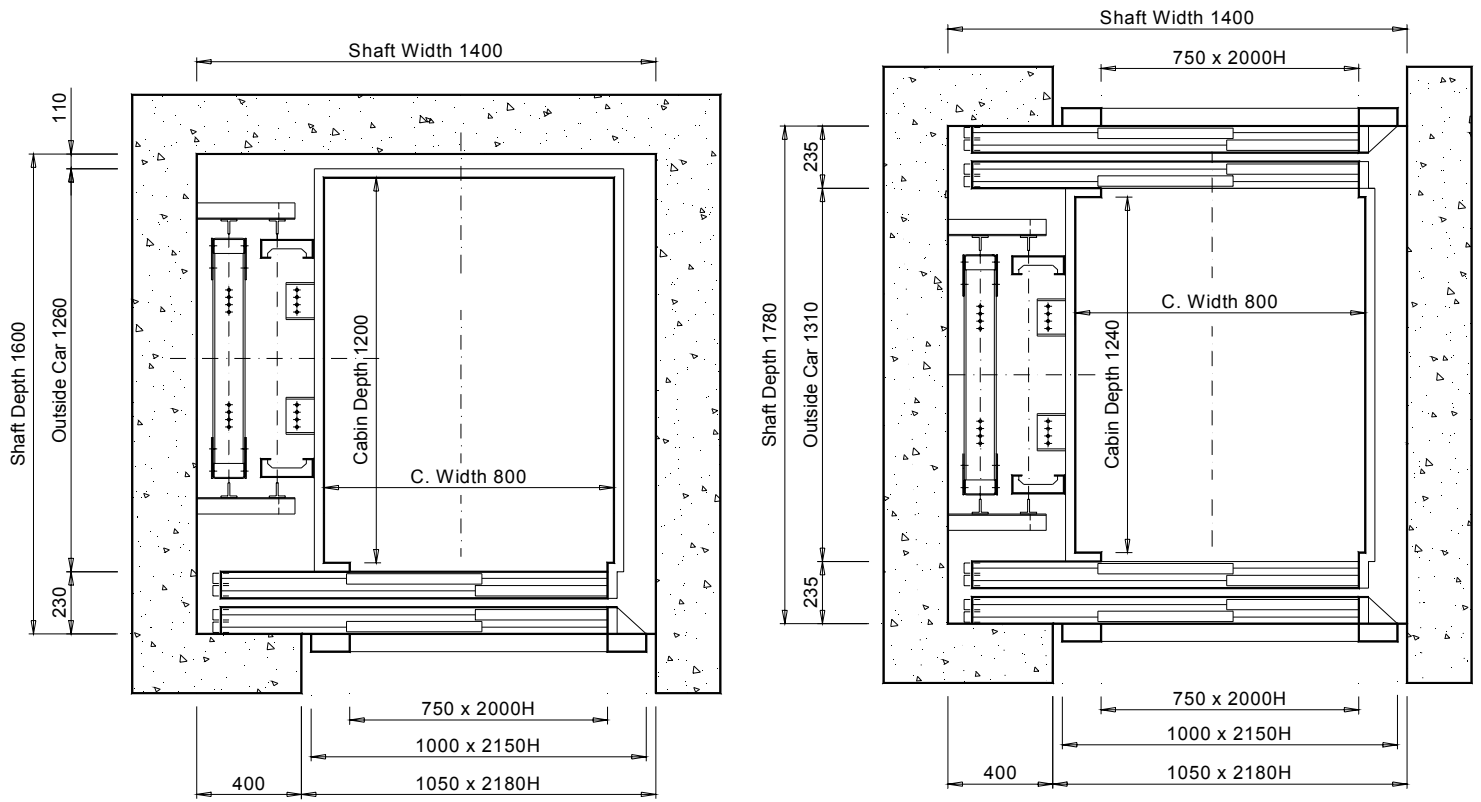
- Brake system to prevent uncontrolled movement of the elevator in upward direction;
- Direct 24 hour communication link from the car to a manned service station;
- System control to avoid car overload;
- Extensive documentation and certification of all safety components;



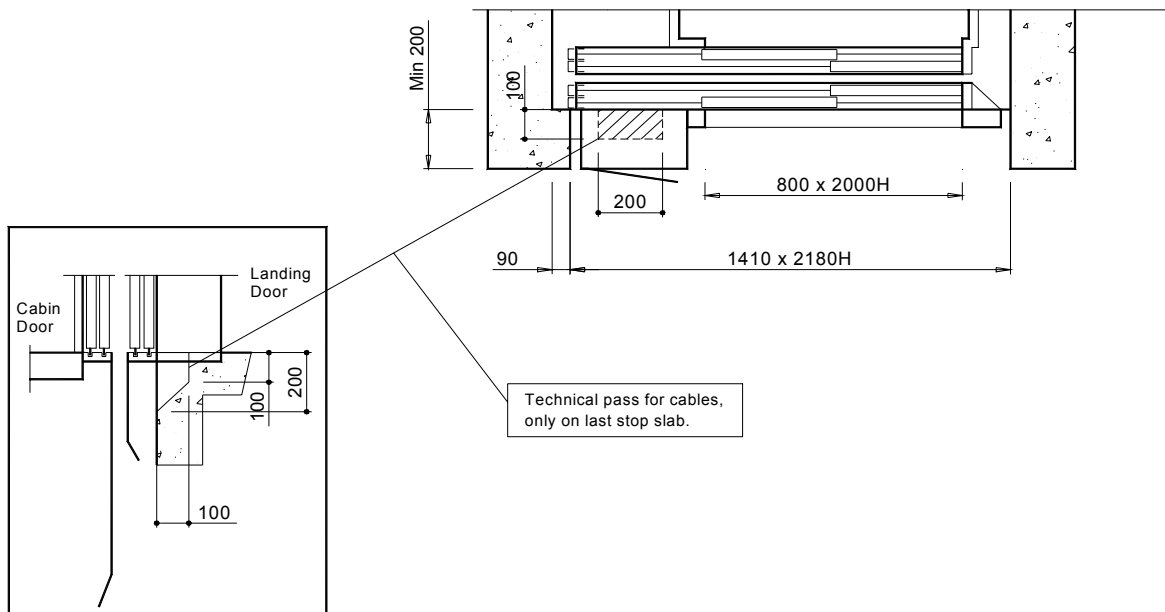
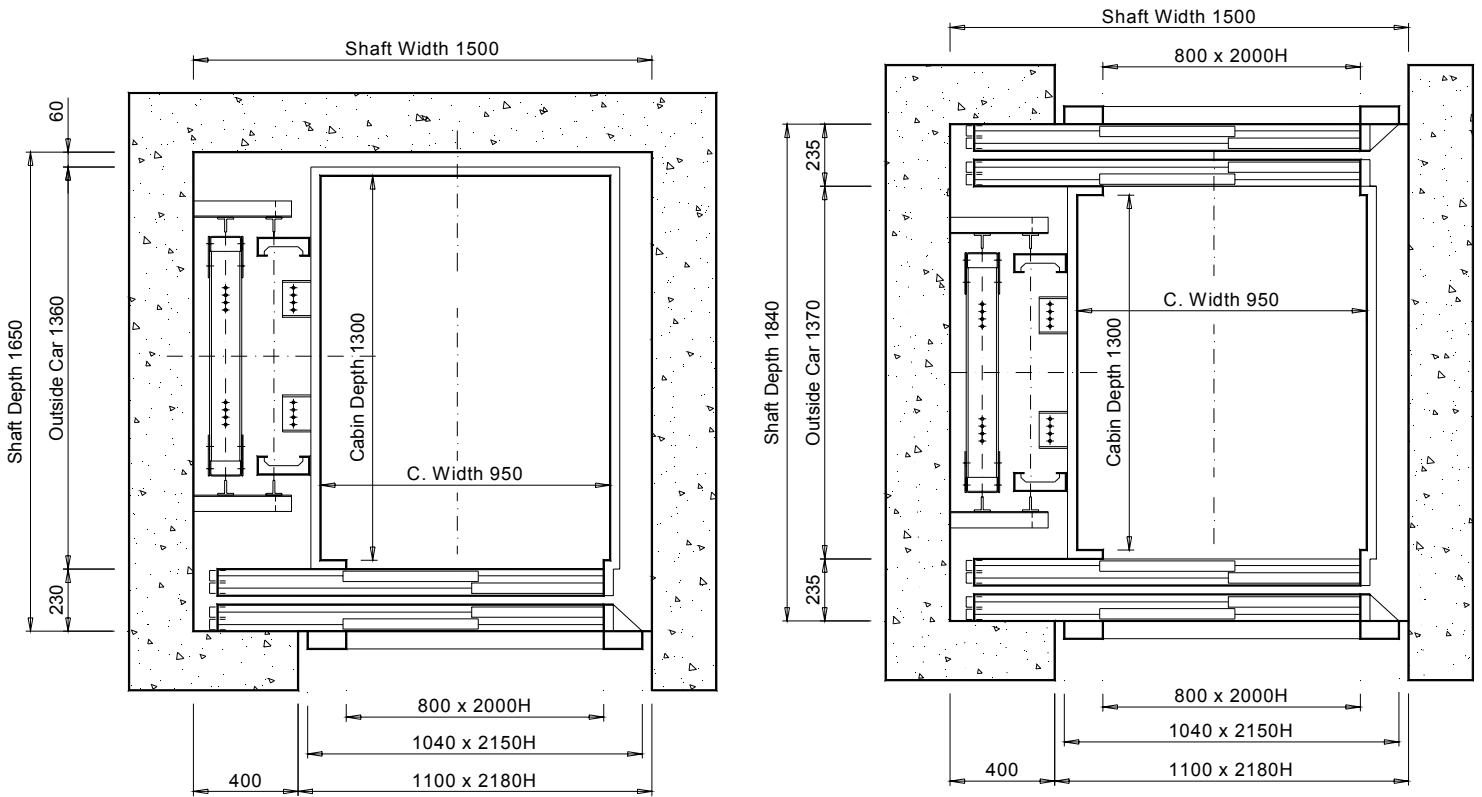
MRL Lift Design Details

Number of Stops:	2 up to 15
Capacity:	up to 650kgs
Travel:	up to 35mt
Pit:	1,2 mt (up to 30mt travel) - 1,5mt (up to 35mt travel)
HeadRoom:	3,6 mt
Control Board:	Beside the door frame on the last stop. Inside a metallic cabinet.
Distance between guide brackets:	2,5 up to 3,3 mt
Speed:	1,0 m/s
Drive:	3VF: frequency regulated speed by an inverter.
Control:	<ul style="list-style-type: none"> a) Normal Automatic : One command per time. During the travel doesn't accept calls from other floors. Multiple calls from cabin not allowed. b) Down Collective: Only during the travel down direction, it collects the new landing calls. Multiple calls in cabin allowed. c) Up and Down Collective: During the travel all direction, it collects the new landing calls. Multiple calls in cabin allowed. d) Duplex: Battery of two lifts served by up/down collective. The nearest cabin responds to the landing calls. e) Triplex: Battery of three lifts served by up/down collective. The nearest cabin responds to the landing calls.
Standard Cabin:	<ul style="list-style-type: none"> a) Cw x Cd x Ch = 800 x 1200 x 2150 mm - 360 kgs - 4 persons b) Cw x Cd x Ch = 950 x 1300 x 2150 mm - 450 kgs - 6 persons c) Cw x Cd x Ch = 1100 x 1400 x 2150 mm - 630 kgs - 8 persons
Door Opening Size:	700 - 750 - 800 - 850 mm
Door type :	<ul style="list-style-type: none"> a) Telescopic Right open with two sliding panels. b) Telescopic Left open with two sliding panels. c) Central open with two sliding panels.
Emergency Drive:	In case of supply electrical failure during the travel, allows to reach the nearest floor and to open the door with an emergency electrical source.

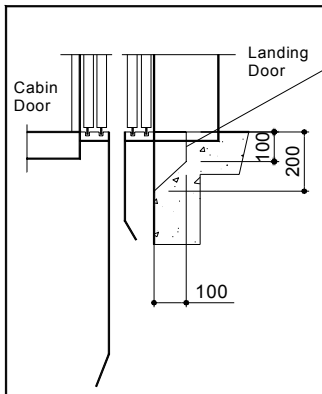
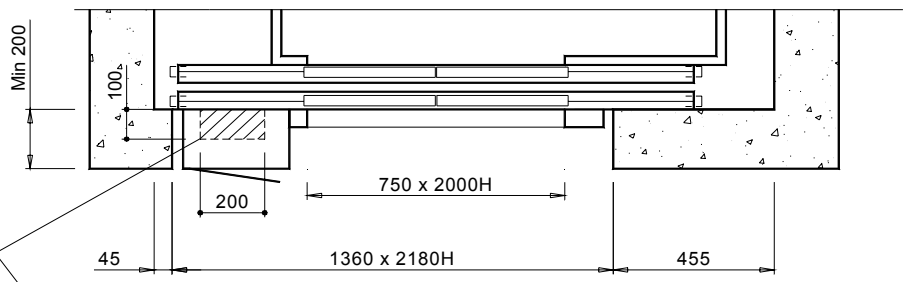
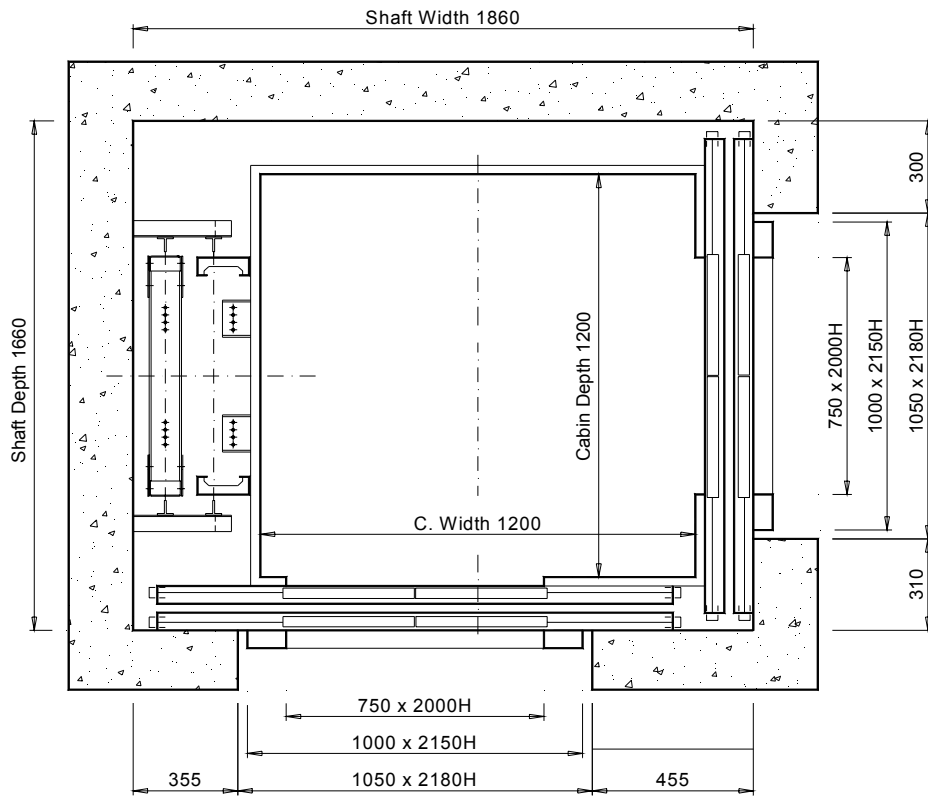
ECO - Electrical Lift 380 kg - Machine Room Less - Telescopic Door



ECO - Electrical Lift 480 kg - Machine Room Less - Telescopic Door

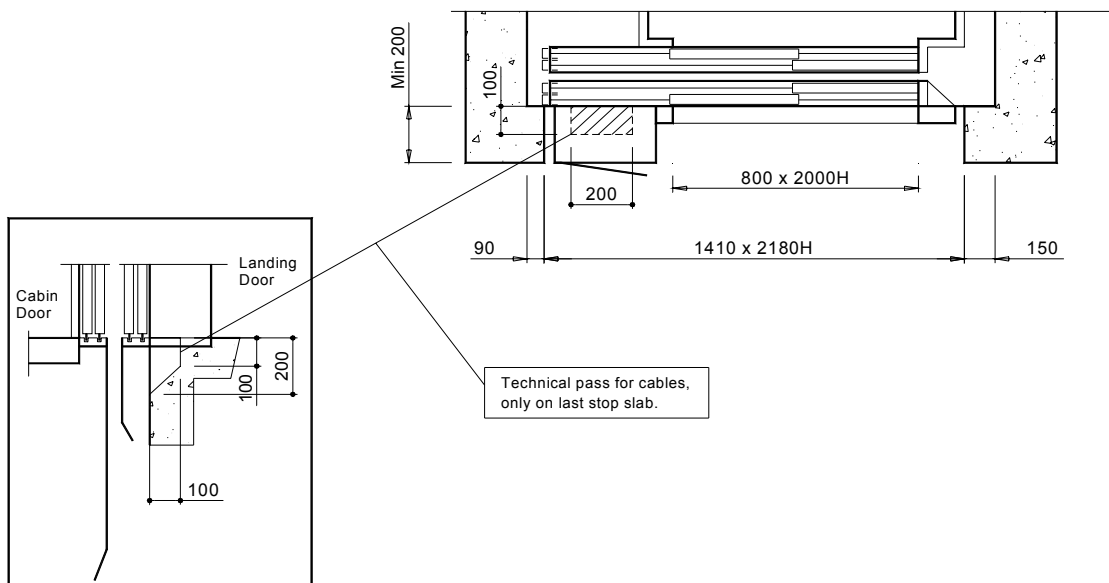
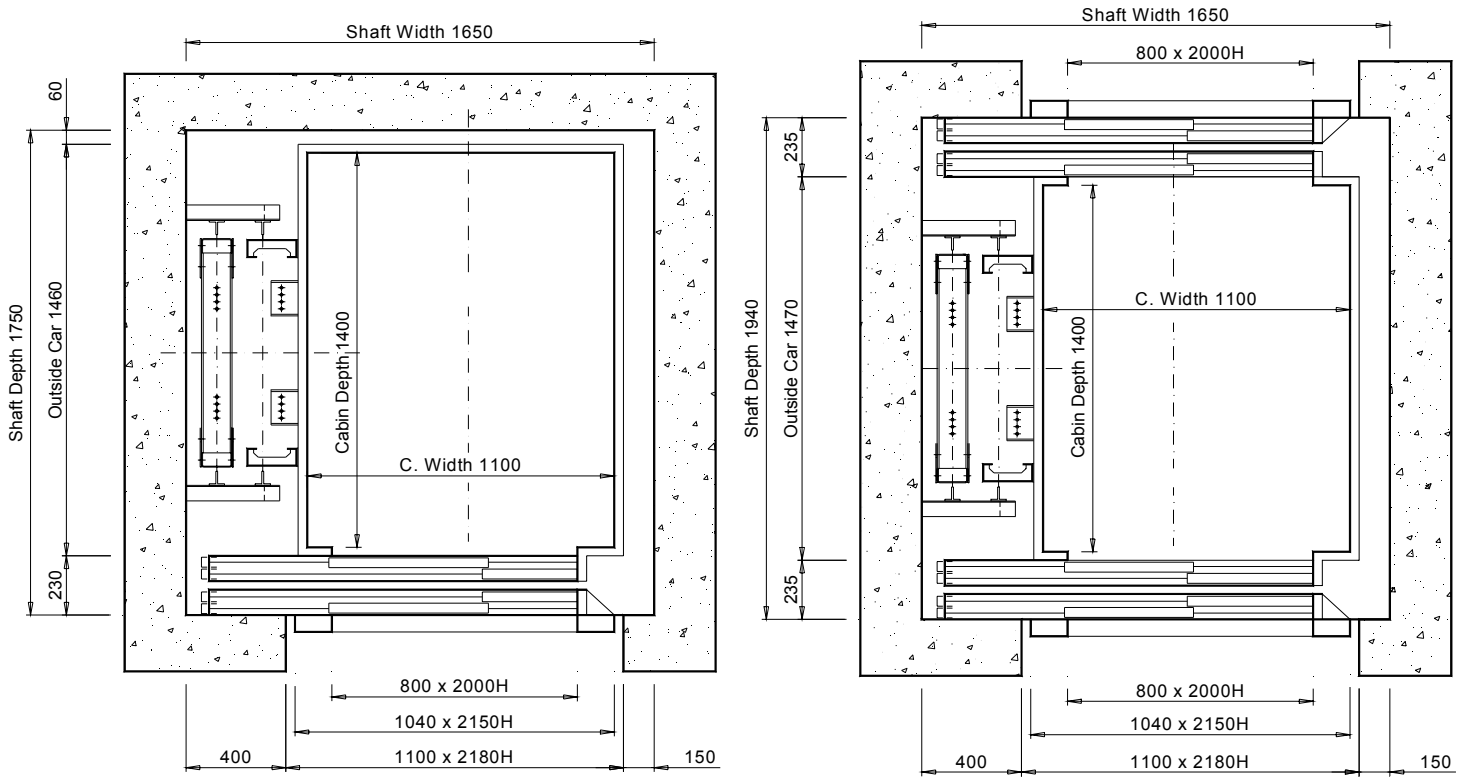


ECO - Electrical Lift 590 kg - Machine Room Less - Double Access Central Door

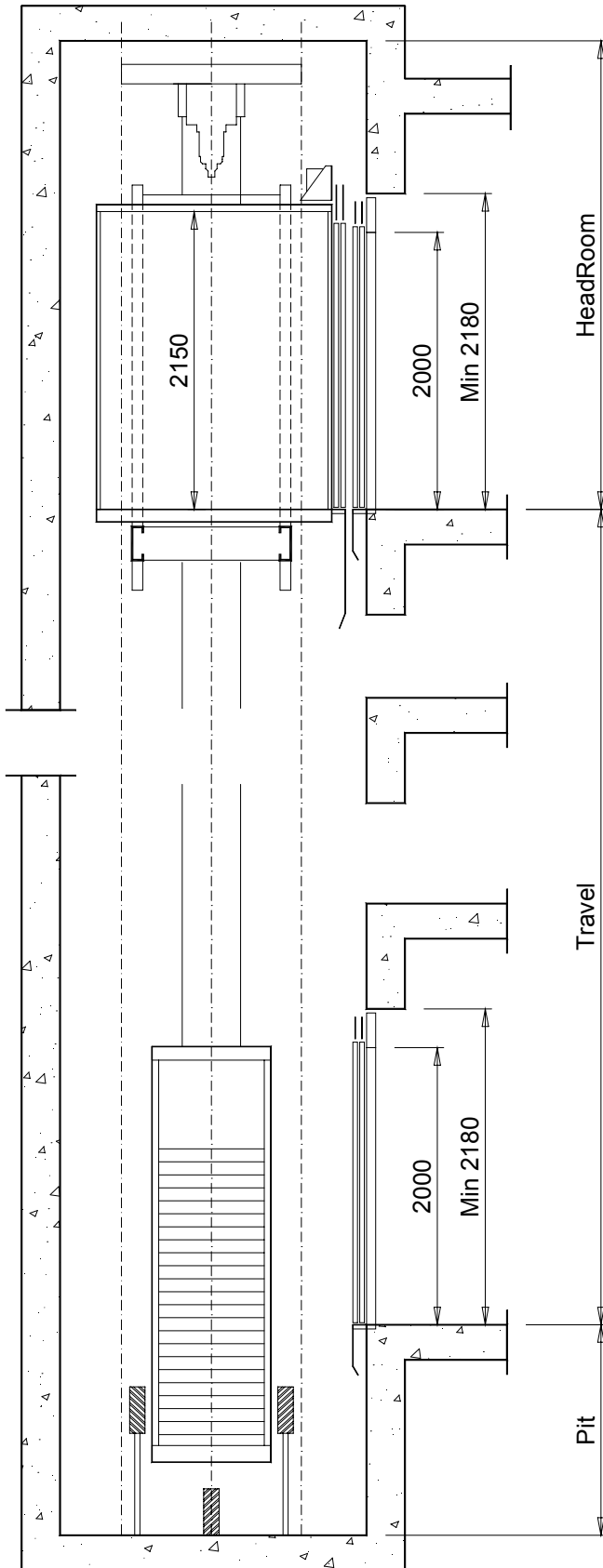


Technical pass for cables,
only on last stop slab.

ECO - Electrical Lift 630 kg - Machine Room Less - Telescopic Door



Section view - ECO Electrical Lift - Machine Room Less

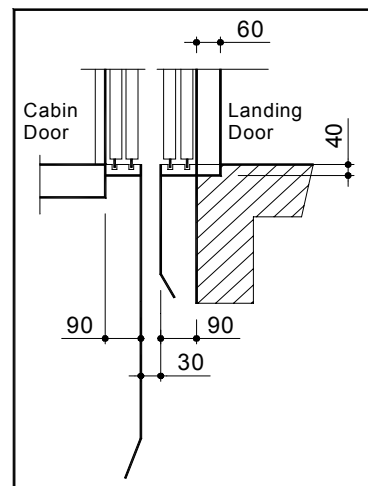


HeadRoom (Min) = 3.600 mm

Travel (Max) = 35.000 mm

Pit (Min) = 1.200 mm with travel < 30.000
 Pit (Min) = 1.500 mm with travel > 30.000

Sill Details
Telescopic Door



Sill Details
Central Door

